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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/591,184

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EXAMINER

AJIBADE AKONAI, OLUMIDE

ART UNIT

PAPER NUMBER

2617

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/591,184	Applicant(s) CHENG ET AL.	
	Examiner OLUMIDE T. AJIBADE-AKONAI	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 12-14, 23, 25-27, 32 and 33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-8, 12, 23 and 33 is/are allowed.
- 6) ☒ Claim(s) 13, 25-27 and 32 is/are rejected.
- 7) ☒ Claim(s) 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed October 27, 2010 have been fully considered but they are not persuasive. In response to the restriction requirement mailed September 27, 2010, the applicants' representative asserts that the examination of the examination of all the claims would not be burdensome. The examiner respectfully disagrees. The groups of claims are directed to distinct inventions, which are in different Classes/subclasses and different search queries. For example, claims 1-8, 12-14, 23, 25-27 and 32 are directed to a negotiation between wireless access point and controller node, whereby the WLAN function is split between the wireless access point and the controller. Searching for this claims will require the examiner to search in class 370, subclass 338, and also to use search queries that are completely different from that of claim 31 (a method in which a network entity receives frames from neighboring entities and using the received frames to determine a network topology), or claim 17 (a method for performing load balancing in a wireless access point, as recited in the claim, which is not related to the system of claim 1). The different searches/queries would be burdensome on the examiner. Therefore the examiner maintains that the restriction requirement mailed September 27, 2010 is proper.

Claim Objections

2. Claim 13 is objected to because of the following informalities: on line 3, delete "a". Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 13, 26, and 27 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 13 recites the limitation "said discover message" in line 7. There is insufficient antecedent basis for this limitation in the claim.

Claims 26 and 27 recite the limitation "**said selected** functional components" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Allowable Subject Matter

5. Claims 1-8, 12, 23 and 33 are allowed.

Claim 14 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 13 are rejected under 35 U.S.C. 102(e) as being anticipated by **Chuah et al 20050059396 (hereinafter Chuah)**.

Regarding **claim 13**, Chuah discloses a method for providing service in a wireless local area network (WLAN) (see fig. 1, p.2, [0020]) that allows a defined WLAN function split between a wireless access point (WAP) (access point 138, see figs. 6A and 6B, p.4, [0044]) and a single or plurality of Control Nodes (CN) (gateway 136, see figs. 6A and 6B, p.4, [0044]) comprising the steps in which: a the WAP discovers CNs that may provide complementary WLAN functions by sending a single or plurality of messages containing information about a subset of WLAN functions of the WAP to all of the CNs in the plurality of CNs (gateway query message, see fig. 6, p.4, [0044]); after receiving said discover message, at least one of the CNs replies with a single or plurality of messages containing information about a subset of WLAN functions said CN has available for the WAP (service discovery message, see fig. 6, p.4. [0045] - [0046]); and said WAP chooses from all the replied CNs a proper CN based on Local policy and establishes an association with said chosen CN (access point selects a gateway, see fig. 6, p.4-5, [0046]).

Regarding **claim 32**, Chuah discloses a wireless access point (WAP) (access point 138, see figs. 6A and 6B, p.4, [0044]) in a wireless local area network (WLAN) (see fig. 1, p.2, [0020]) that allows a defined WLAN function to be split between the wireless access point (WAP) and one or more Control Nodes (CNs), the WAP comprising: a discovery function which initiates a discovery operation to discover a

Control Node (CN) (gateway 136, see figs. 6A and 6B, p.4, [0044]) among said one or more CNs that may complement said WAP with respect to providing said defined WLAN function by sending a plurality of discover messages (gateway query message, see fig. 6, p.4, [0044]) containing information about its own subset of the defined WLAN function, to the one or more CNs (access point transmitting gateway query message to one or more gateways, see fig. 6, p.4, [0044]); a receiving function which receives one or more reply messages from said one or more CNs in response to said discover messages, said one or more reply messages including information about a subset of the defined WLAN function, said one or more CNs have available for the WAP (service discovery message, transmitted from the gateways to the access point see fig. 6, p.4. [0045] - [0046]); a choosing function which chooses from among said one or more CNs that sent said one or more reply messages a particular CN based on local policy (access point selects a gateway, see fig. 6, p.4-5, [0046]).

8. Claims 25-27 are rejected under 35 U.S.C. 102(e) as being anticipated by **Cain et al 20050053005 (hereinafter Cain)**.

Regarding **claim 25**, Cain discloses a method for accommodating variances in a wireless network topology (MANET, see p.2, [0013], [0021]) comprising a step of dynamically adapting an operations logic of at least one network entity (controller, see p.2, [0013]) of said wireless network topology to alter processing of one or more functional sub-components (controller adjusting transmission parameters based on network topology changes, see p.2, [0013]-[0015], [0017]-[0018]).

Regarding **claim 26** as applied to claim 25, Cain further discloses a step of altering processing of selected functional sub-components at the at least one network entity by bypassing said processing of said selected functional sub-components (controller adjusting/maintaining transmission parameters based on network topology changes, steps 103-107, see fig. 10, p.2, [0013]-[0015], [0017]-[0018]).

Regarding **claim 27** as applied to claim 25, Cain further a step of altering processing of selected functional sub-components at the at least one network entity by selectively processing said selected functional sub-components (controller adjusting transmission parameters based on network topology changes, see p.2, [0013]-[0015], [0017]-[0018]).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Benveniste 7,606,208 discloses distributed architecture for deploying multiple wireless local-area networks.

Tervo et al 7,478,146 discloses a system, apparatus, and method for communicating capabilities of a mobile device.

Simpson-Young et al 7,191,236 discloses transparent telecommunications system and apparatus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OLUMIDE T. AJIBADE-AKONAI whose telephone number is (571)272-6496. The examiner can normally be reached on M-F, 8.30p-5p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on 571-272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/OLUMIDE T AJIBADE-AKONAI/
Examiner, Art Unit 2617